

Heather A. McCauley

Forensic Chemistry Center
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EDUCATION

Bachelor of Science, Chemistry

Bachelor of Science, Biology

University of Cincinnati, Cincinnati, OH. August 1994

ADDITIONAL TRAINING

- Computer Aided Inspections, Rockville, MD, February 2018.
- Active Pharmaceutical, Pre-Approval and Sterile Inspections, Indianapolis, IN, September 2017.
- Systems Based Drug Inspections, New Orleans, LA, July 2017.
- DiscovIR-GC training, Forensic Chemistry Center, Cincinnati, OH, Sept 2015.
- Pharmaceutical Inspection Course, San Juan District Office, FDA, San Juan, Puerto Rico. Jun 2001
- Advanced Chromatographic Techniques, Kansas City District Office, FDA, Kansas City, KS. Mar 1999
- Expert Witness Workshop, Food and Drug Administration, Cincinnati, OH. June 1998
- Young Forensic Science Forum, AAFS, San Francisco, CA. February 1998.
- Mass Spectra Theory and Interpretation, Forensic Science Institute of Ohio, London, OH. August 1997

PROFESSIONAL EXPERIENCE

- **Director of Investigations**, May 2018 - present
U.S Food and Drug Administration, Human and Animal Food, Division 5E, Cincinnati, OH
- **Chemist, 1992 – present**
U.S. Food and Drug Administration, Forensic Chemistry Center, Cincinnati, OH
- **Acting Director of Investigations Branch, Jan 2016 – March 2016**
U.S. Food and Drug Administration Forensic Chemistry Center, Cincinnati, OH
- **Acting Supervisor Consumer Safety Officer, Jun 2015 – Sept 2015**
U.S. Food and Drug Administration Forensic Chemistry Center, Cincinnati, OH
- **Acting Director of Investigations Branch, Jan 2015 – April 2015**
U.S. Food and Drug Administration Forensic Chemistry Center, Cincinnati, OH
- **Acting Deputy Director of Investigations Branch, Mar 2014 – April 2014**
U.S. Food and Drug Administration Forensic Chemistry Center, Cincinnati, OH
- **Acting Supervisor, Interdisciplinary Scientist, Jan 2013 – Mar 2013**
U.S. Food and Drug Administration Forensic Chemistry Center, Cincinnati, OH
- **Applications Technician Aug 1991 – Aug 1992**
Tekmar Co., Cincinnati, OH

HONORS AND AWARDS

- Group Recognition Award – Vietnam Seafood Analysis, July 2017
- FDA Leveraging/Collaboration Award – Listeria Monocytogenes in Bagged Leafy Greens, July 2017.
- Group Recognition Award – Weight Loss Products Group, Aug 2015
- Group Recognition Award – Ophthalmic Drops Analysis Group, June 2014
- Group Recognition Award – PAH and DOSS Analyses in Gulf Seafood Training Group, August 2012
- FDA/ORCA Excellence in Analytical Science Award – Deepwater Horizon PAH Method

Analytical Group, May 2011

- Group Recognition Award – Internet Pharmacies Analytical Working Group, June 2010
- FDA Commissioner's Special Citation Award – Tainted Weight Loss Supplement Interagency Working Group, June 2009
- FDA Group Recognition Award – Pet Food and Animal Feed Contaminant Response Group, May 2008
- FDA Group Recognition Award – Post-Filtration Hemolysis Response Group, June 2006
- FDA Leveraging/Collaboration Award – Designer Drug Website Investigation Team, May 2006
- FDA Leveraging/Collaboration Award – Adulterated Deer Meat Investigation Team, May 2005
- FDA Group Recognition Award – Suspect/Adulterated Flu Vaccines Investigation Work Group, May 2005
- FDA Commissioner's Special Citation Award – Interagency Chromium Cattle Emergency Response Team, May 2005
- FDA Individual Award: For participating in the Counter Terrorism Liberty Shield Workshop, March 2004
- FDA Group Award: For playing a significant part in the successful role of the FCC in Operation Liberty Shield, August 2003
- FDA Group Recognition Award: Counterfeit Pharmaceuticals Investigations Work Group, April 2002
- FDA Group Recognition Award: GHB, GBL, Work Group, May 2001
- FDA Group Recognition Award: Mexican Drugs Work Group, May 2000
- Special Act or Service Award: Tobacco Research, May 1997
- Special Act or Service Award: Vet Drug Forensic Work Group, May 1996
- Mathematics scholarship , University of Cincinnati, 1990

MEMBERSHIP IN PROFESSIONAL SOCIETIES

1/98 American Academy of Forensic Sciences (elected)

SPECIAL ASSIGNMENTS

2/2011 Gulf State Training for PAH and DOSS Analyses, Cincinnati, OH

08/2002 thru 2010 Basic Mass Spectrometry Course, Cincinnati, OH and Denver, CO.
Instructor for GC-MS Applications presentation and GC-MS laboratory sessions.

3/2010 & 6/2010 LB508 Food Emergency Response Network (FERN) Gas Chromatography-Mass Spectrometry (GC-MS), Cincinnati, OH

02/2006 Advanced Chromatography Course, Irvine, CA. Instructor for GC Method Development/Validation and GC-MS laboratory sessions

4/03 Invited speaker for the Younger Chemist's Committee of the American Chemical Society

12/00 Instructor for "A Laboratory Seminar Focusing on the Analysis of Benzodiazepines and GHB in DUI and Drug Facilitated Rape Cases" sponsored by The Forensic Science Institute of Ohio and The Ohio University Department of Chemistry.

9/97 Advanced Chromatographic Techniques Course, Denver, CO. Instructor for GC-FTIR Applications presentation.

PARTICIPATION IN NATIONAL SCIENTIFIC MEETINGS

Conference on Small Molecule Science, August 2013. Presented paper "Prohibited Channels: The Analysis and Identification of Diverted Pharmaceuticals".

American Academy of Forensic Sciences, Denver, Feb 2009. Presented paper "Available Without a Prescription - The Presence of Pharmaceuticals in Dietary Supplements".

American Academy of Forensic Sciences, New Orleans, Feb. 2005. Presented paper "Game's Up- The Presence of Tranquilizers and Stimulants in Venison Detected by HPLC-MS".

Midwestern Association of Forensic Scientists, Columbus, OH., Oct 2003. Presented paper "Case Study – From Complainant to Suspect: 'Flushing Out' the Truth".

American Academy of Forensic Sciences, Reno, Feb. 2000. Presented paper "GHB, GBL, BD: A Recipe for Disaster".

American Academy of Forensic Sciences, San Francisco, Feb, 1998. Presented paper "Lessons from Arson Analysis: The Examination of Foods and Beverages Adulterated with Petroleum Distillates".

Pittsburgh Conference, Atlanta, Feb 1997. Attended for informational exchange.

Federation of Analytical Chemists and Spectroscopists Society, Cincinnati, Oct, 1995. Presented paper "Forensic Applications of GC-FTIR".

PUBLICATIONS

Adam Lanzarotta, Travis Falconer, Heather McCauley, Lisa Lorenz, Douglas Albright, John Crowe, and JaCinta Batson, "Simultaneous Orthogonal Drug Detection using Fully Integrated Gas Chromatography with Fourier Transform Infrared Detection and Mass Spectrometric Detection". *Applied Spectroscopy*, [available online](#) September 19, 2016.

S.R. Gratz, L.A. Ciolino, A.S. Mohrhaus, B.M. Gamble, J.M. Gracie, D.S. Jackson, J.P. Roetting II, H.A. McCauley, D.T. Heitkemper, F.L. Fricke, W.J. Krol, T.L. Arsenault, J.C. White, M.M. Flottmeyer, Y.S. Johnson "Screening and determination of polycyclic aromatic hydrocarbons in seafoods using QuEChERS based extraction and high performance liquid chromatography with fluorescence detection". *Journal of the AOAC International*, 2011, 94, 1601-1616.

Laura A. Ciolino, Tracy L. Ranieri, Angela S. Mohrhaus, Heather A. McCauley, Brian L. Boyd, Samuel R. Gratz, "Screening for Sibutramine and Sibutramine Analogs in Weight Loss Supplements by Gas Chromatography-Mass Spectrometry" *Laboratory Information Bulletin No. 4455*, Food and Drug Administration DFS/ORO/ORA, Volume 16, No. 7, May, 2010. (FDA wide publication)

H A McCauley, L A Ciolino, A S Mohrhaus, and T L Ranieri, "Available Without a Prescription - The Presence of Pharmaceuticals in Dietary Supplements", American Academy of Forensic Sciences Proceedings, Feb 2009, Vol 15.

H A McCauley and R A Flurer, "Game's Up - The Presence of Tranquilizers and Stimulants in Venison Detected by HPLC-MS", American Academy of Forensic Sciences Proceedings, Feb 2005, Vol 11

Laura A. Ciolino, Heather A. McCauley, Diane B. Fraser, Karen A. Wolnik. "The Relative Buffering Capacities of Saliva and Moist Snuff: Implications for Nicotine Absorption", *Journal of Analytical Toxicology*, 25, 2001, 15-25.

Laura A. Ciolino, Mantai Z. Mesmer, R. Duane Satzger, A. Caroline Machal, Heather A. McCauley, and Angie S. Mohrhaus. "The Chemical Interconversion of GHB and GBL: Forensic Issues and Implications". *J. Forensic Sci* 2001; 46(6): 1315-1323.

Heather A. McCauley, A. Caroline Machal, Laura A. Ciolino, Mantai Z. Mesmer, and R. Duane Satzger, "GHB, GBL, BD: A Recipe for Disaster", *Clandestine Laboratory Investigating Chemists*

GHB Monograph, November 1-4, 2000 (10th Annual Technical Training Seminar, Brisbane, Australia)

Heather A. McCauley, A. Caroline Machal, Laura A. Ciolino, Mantai Z. Mesmer, and R. Duane Satzger, "GHB, GBL, BD: A Recipe for Disaster", Proceedings of the American Academy of the Forensic Sciences, February 21-26, 2000, 43 (conference proceedings).

L.A. Ciolino, J.A. Turner, H.A. McCauley, A.W. Smallwood, T.Y. Yi, "Optimization study for the reversed phase ion-pair liquid chromatographic determination of nicotine in commercial tobacco products", *Journal of Chromatography*, 852, 1999, 451-463.

Laura A. Ciolino, Heather A. McCauley, Diane B. Fraser, Debra Y. Barnett, Timothy Y. Yi, James A. Turner, "Reversed Phase Ion-Pair Liquid Chromatographic Determination of Nicotine in Commercial Tobacco Products. 1. Moist Snuff ", *J. Agric. Food Chem.*, 47, 1999, 3706-3712.

Laura A. Ciolino, Diane B. Fraser, Timothy Y. Yi, James A. Turner, Debra Y. Barnett, Heather A. McCauley "Reversed Phase Ion-Pair Liquid Chromatographic Determination of Nicotine in Commercial Tobacco Products. 2. Cigarettes", *J. Agric. Food Chem.*, 47, 1999, 3713-3717.

Heather A. McCauley and R. Duane Satzger, "Lessons from Arson Analysis: The Examination of Foods and Beverages Adulterated with Petroleum Distillates", Proceedings of the American Academy of Forensic Sciences, February 9-14, 1998, 44 (conference proceedings).

Mulligan, Kevin J., and McCauley, Heather A., "Factors That Influence the Determination of Residual Solvents in Pharmaceuticals by Automated Static Headspace Sampling Coupled to Capillary GC-MS", *Journal of Chromatographic Science*, 33, 1995, 49-54.

Heather A. McCauley, Larry E. Ellis, and R. Duane Satzger, "Forensic Applications of GC-FTIR", FACSS XXII Final Program, October 15-20, 1995 (conference proceedings).

OTHER SIGNIFICANT INFORMATION

9/2002 – 2010	Chairperson for the CIN-DO/FCC Combined Federal Campaign
1/1998-1/1999	President of Cincinnati District/FCC Employee Interaction Team
1/1997-1/1998	Information Coordinator and Vice-president of Cincinnati District/FCC Employee Interaction Team
7/1995	Representative of the Cincinnati District at the annual Federally Employed Women's Conference